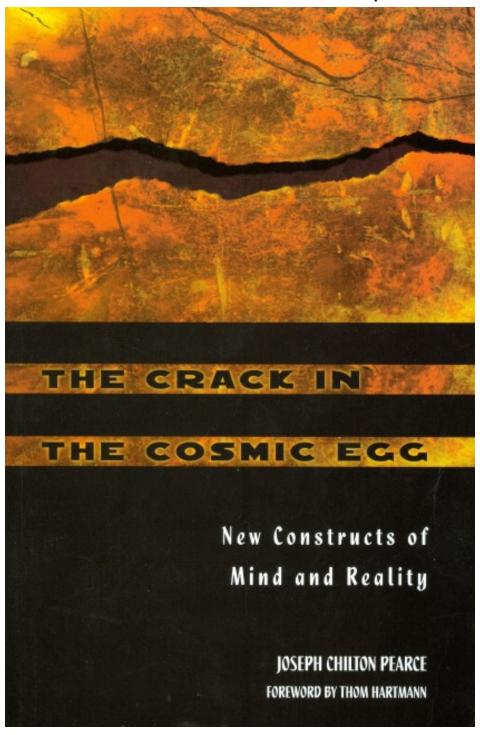
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The <u>cosmic egg</u> is an ancient concept resurrected by modern science in the 1930s and explored by theoreticians during the following two decades. The idea comes from a perceived need to reconcile Edwin Hubble's apparent observation of an expanding universe (which is also understood to be consistent with the Einstein field equations) with the notion that *the Universe must be eternally old*.

- Adapted from Wikipedia, "Cosmic egg," (c. May 2010).

From *The Crack in the Cosmic Egg* by Joseph Chilton Pearce, Park Street Press Copyright © 2002 Inner Traditions, Bear & Co.

Underlined text is hyperlinked to the Internet, primarily to Wikipedia.

Chapter 1, p. 8

To be "realistic" is the high mark of intellect, and assures the strengthening of those acceptances that make up the reality and so determine what thoughts are "realistic." Our representation-response interplay is self-verifying, and circular. We are always in the process of laying our cosmic egg.

The way by which our reality picture is changed provides a clue to the whole process. A change of concept changes one's reality to some degree, since concepts direct percepts as much as percepts impinge on concepts. There are peculiarities and exceptions... These are linear thrusts that break through the circles of acceptancy making up our reality.

<u>Metanoia</u> is the Greek word for conversion: a "fundamental transformation of mind." It is the process by which concepts are reorganized. *Metanoia* is a specialized, intensified adult form of the same world-view development found shaping the mind of the infant. Formerly associated with religion, *metanoia* proves to be the way by which all genuine education takes place. <u>Michael Polanyi</u> points out that a "conversion" shapes the mind of the student into the physicist. *Metanoia* is a seizure by the discipline given total attention, and a restructuring of the attending mind. This reshaping of the mind is the principal key to the reality function.

p.12

The history of the scientific discipline shows that after a certain discreet courtship, the proper passion to implant the mathematical gamete into the cosmic egg currently in season, a new idea, "indwelled" by the brotherhood as Polanyi might say, will finally gestate and eventually be born into the world of the common domain.

First comes The Word, the cabalistic sign, the representation of possibility in a way that can be believed by the brotherhood of believers. After that comes the discovery. The relation of fact and idea is not quite magic, and it is not quite of the same reality as hen's eggs either. Rather, thinking is a shaping force in reality.

p. 13

Our imaginations cannot set out to find the cracks in the cosmic egg until someone lays the egg. New representations for reality, new ideas, new fabrications of fantasy searching for supporting logic, must precede the final "discovery" by which verification of the notion is achieved.

p. 16

Robert Frost saw civilization as a small clearing in a great forest. We have hewn our space at no small cost, and the dark "out there" seems ever ready to close in again—a collapse into chaos should our ideation fail. In my book I shall consider Frost's clearing to be the disciplines of mind, reality-adjusted thinking, reason, logic, civilization, society, culture. I shall consider the dark forest to be the primal stuff, the unconscious, the unknown potential—perhaps just an "empty category." In my next chapter I will define the psychological term *autistic-thinking* and refer to it as the borderline between clearing and forest. Then I will try to outline the interaction between these aspects of the reality function.

p. 18

The high priests of the disciplines controlling our cultural circle try to tell us that logic and reason are the sum total of things, or, if more is possible, that it is only so through *their* controls, which are their own logical rules. Logic and reason are surely the stuff of which the clearing is made, and the high point of life's thrust. Yet these techniques of mind tend to become destructive and to trap us in deadlocks of despair.

Logic and reason are like the tip of an iceberg. The naïve realists, the biogenetic psychologists, the rats-in-the-maze watchers, claim the tip is all there is. Yet life becomes demonic when sentenced to so small an area. There are times when we need to open the threshold of mind to that unknown subterranean depth—and we always need to believe in its existence.

And so, though our cosmic egg is the only reality we have, and is not to be treated lightly, what I hope to show is that there is available to us a crack in this egg. For there are times when the shell no longer protects but suffocates and destroys. The crack must be approached with care, however, lest the egg itself be destroyed. There is a story in the Codex Bezae, a fifth-century manuscript of the Gospel According to St. Luke, that illustrates this circle-line problem. Jesus and his disciples were cutting across a field one Sabbath morning when they came across a man gathering in

his grain. The Sabbath was a strictly no-work day, of course, and Jesus had been censured by the Establishment for just this kind of infringement. He knew that only by agreed upon criteria for acceptable acts can a civilization exist, and so he looked at the man and said: "Man, if you *know* what you are doing, you are blest. If you do *not* know what you are doing, you are accurst and a transgressor of the law."

The mirroring of mind and reality finds its best expression in a comment by Jesus almost universally ignored. Those who claim to have heard him insist that supplication is the way out. They cry that we should look to heaven for our answers. But Jesus, that harsh realist, recognized the play of mirrors, and pointed out that: "What you loose on earth is loosed in heaven."

Chapter 2, p. 20

Autistic thinking (or A-thinking) is an unstructured, non-logical (but not necessarily illogical), whimsical thinking that is the key to creativity. It involves "unconscious processes" but is not necessarily unconscious. Autistic thinking is indulged in, or in some cases *happens* to one, in ordinary conscious states. The autistic is a kind of dream-world mode of thinking. This left-handed thinking is nevertheless a functional part of reality formation. It is the connecting link between our "clearing" and "forest." It is the pearl of great price. It is the way by which potential unfolds.

Later I will suggest how this primary process of mind is structured and modified into an adult world view. This structuring process that we call *maturing* is a modifying procedure that represses and largely eliminates, by the very act of maturation, the open-ended potential which thinking encompasses.

Michael Polanyi wrote that creative thinking was thinking as a child with the tools of logical structuring given by maturity. This is the key. Most logical structuring is bought at the price of this child-thinking. There remains a certain feyness, a childlike quality, in all great creative people. In them, somehow, a thread remains intact between their modes of thought. It is a return to this primary-process thinking which brings about *metanoia*, conversion, the *Eureka*! illumination of creative thinking, the seizure by the gods which restructures an event to allow fire-walking, the transfer of hypnotism which allows non-ordinary structuring of events, and so on.

It was this re-entrance into primary-process thinking by the adult, matured, reality-adjusted mind that brought about Jesus' Kingdom. The structuring process by which the world is born and shaped anew in a mind is the way by which the mind and its world may be reborn and reshaped.

Whether this re-entry and reshaping process gives a Kingdom of Heaven, the illumination of $E = mc^2$, or the double-helix postulate as an "empty category" to be eventually filled with content, is incidental to the process. All leavenings raise the flour. There is no logical, rational, pre-structured criterion "out there" with a divine plan. There is no truth "out there" which our weak minds or souls eventually run across. There is this casual, haphazard, amoral process that leaps the logical gaps and brings about newness. And the procedures only demand is that given talents be invested, risked, doubled, the possibilities explored.

World view development in a child modifies his primary process thinking, that archetypal mode that melts out into a continuum. This structuring modifies, but also gives the child's world-to-view the form in which, and only in which growth, expansion, and possibility can unfold. World view development limits and thwarts, but there is no other way to have a world-to-view.

<u>Metanoia</u> changes, to varying extents, this fundamental structure built since infancy. The change of concept is brought about by a *retracing* of the original formative process of world view development, and a reshaping of the concepts originally formed.

When the postulate arrives out of the blue, and a person suddenly "sees" a long desired answer to a problem, when "illumination" or understanding is suddenly achieved, this re-formation process has taken place in relation to some specific possibility. All creative mental phenomena involve this autistic thinking and follow a similar pattern of development in the mind. All such phenomena are reality-influencing, or capable of influencing reality. In each case there is a change of concept that changes some aspect of the logical world view and introduces a new "seeing," which itself may eventually bring about new things to be seen within the broad, statistical mode of reality-adjusted, social thinking.

One cannot induce creative autistic thinking *ad lib*., however. It is bought at a price. The creative aspect of A-thinking is not controllable, and cannot be duplicated by a computer, for the autistic mode *adds something* not in the given context. There is a catalystic quality in A-thinking that gives *more than* the sum of the parts suggesting and bringing about the new possibility.

This A-thinking catalyst is not one's *personal* thinking. Rather, it happens to a person. It *happens* to a person, though, only after the person has achieved a certain saturation point of his controlled, directed reasoning. The creative will-o'-the-wisp occurs only *after* rigorous logical thinking. It is the Spirit that is found only when one has exceeded and gone beyond the lawyers and Pharisees.

Chaper 3, p. 48

A social world view, one shared with other people, is structured from our infant minds by the impingements on us from, and the verifying responses to us by, other people. A mind finds its definition of itself not by confrontation with *things* so much as other minds. We are shaped by each other. We adjust not to the reality of a *world* but to the reality of other thinkers. When we have finally persuaded and/or badgered our children into "looking objectively" at their situation, taking into consideration those things other to themselves, we relax since they are being *realistic*. What we mean is that they have finally begun to mirror our commitments, verify our life investments, and strengthen and preserve the cosmic egg of our culture.

... [3 paragraphs skipped]

As the body must be fed to realize the potential built into the genes as a blueprint waiting development, so must the mind. Jung used the term <u>archetype</u> to describe "recurrent impressions made by subjective reactions." We inherit such ideas as part of our potential mind pattern. <u>Archetypes</u>, however, are only a kind of <u>readiness</u> to produce over and again the same mythical ideas. If the readiness is not triggered by a response or a demand, that particular possibility remains dormant and even steadily diminishes.

Linguists are intrigued by the readiness with which the infant seizes a language, *if* given the referents. The "readiness" of language can miscarry, as <u>Susanne Langer</u> put it, because of lack of the trigger-response interplay. If this happens, the world view shaped by that language miscarries too and never forms. Then participation in that kind of world is permanently blocked. <u>Leonard Hall</u> [very likely this is supposed to read <u>Edward Hall</u>] writes that our culture and our reality are not separate phenomena. People of different cultures not only speak different languages, but inherit different sensory worlds.

<u>Lévi-Strauss</u> uses the term "semantic-universe" to describe our intellectual-scientific-technological fabric of reality. <u>Jerome Bruner</u> suggested that language is our most powerful means for performing "transformations" on the world. We transmute the world's shape by metaphoric mutations. We recombine our verbal structures in the interest of new possibilities.

Susanne Langer considered language to be conception and concept the frame of perception. Thus, for Langer, we live in a "primary world" of reality that is verbal. The *word* for a thing helps to arrest an infant's visual process and focus it on a specific thing. It is the combination of sensory possibilities, parental focus, and innate drives for ordering, that organizes the child's visual field. Then the word-thing growth becomes exponential, growing like a tree at every tip. Grouping, identifying, correlating, with a constant check with his exemplars, gives the young child an exciting participation and communion, a defining of self and world. Langer calls even nature a "language-made affair," made for understanding, and "prone to collapse into chaos if ideation fails." Fear of this collapse may be the most potent fear in civilized man.

It is our ideation that shapes our children. We provide an enriched environment, visual, aural, tactile stimuli to furnish the best supply of raw materials, but our own background determines what we decide makes up a "rich environment." And then, quite naturally, we expect our children to shape this material into a pattern verifying our commitments. We look for agreement.

... [8 paragraphs skipped]

<u>William Blake</u>, in his outrage against the dead world of a <u>John Locke</u>, cried: "Man's mind is like a garden ready planted. This world is too poor to produce one seed." We find, nevertheless, that the specifics of the plantings are given shape by the kind of weeding, thinning, and fertilizing done by other minds. ...

Gesell considered the capacity of an individual to acquire and create culture to be inborn, but he pointed out that the culture which surrounds an individual operates as a "large-scale molding matrix, a gigantic conditioning apparatus." He warned against oversimplifying the complex and interwoven riddle of "nature versus nurture." And surely if only a [barbaric culture] is offered as the mirroring pattern, this is nevertheless seized upon by the programmed pattern of response and responded to, giving a structured world in which to move.

An error causing grief in our time is the idea that culture and civilization are recent acquisitions, and that all previous cultures were but crude gestures laying the groundwork for our own enlightened emergence into truth. <u>Erickson</u> denies

that primitive societies are "infantile stages of mankind," or arrested deviations from the "proud progressive norms which we represent." They are, he states, a "complete form of mature human living." <u>Lévy-Bruhl</u> spoke of prehistoric man not as a *protoscientist* who arrived at false conclusions, but another type of man entirely, whose mental life differed from ours in kind. I would qualify this by observing that primitive man is not so much a different type as of a different esthetic bent. Lévi-Strauss finds archaic cultures a unified, coherent, intellectual scheme, based on different logical premises from our own. <u>Jensen</u> deplores the theory that early man arrived at totally erroneous conclusions regarding cause and effect.

Culture is not an autonomous venture; autistic thinking remains autistic until modified by another mind which is also modified by the relation. But the capacity and drive to create a culture *is* innate. It is an enormous formative potential that realizes itself against the most extreme odds.

Oversold on the splendors of "realistic," tough-minded thinking, we are led to believe that current methods represent discovery of universal truths and are thus sacred, rather than particular esthetic choices. Notions of what we are, and of what our capabilities are, change with a marvelous disregard for consistency. Yet these world views tend to bring about the very state of mind they hold to be the case. We become what we behold.

The danger of accepting a programmed infant mind is that we might decide the mind was really programmed for *our* particular show, and that all the dark ages preceded this final light. We must, rather, realize the program capacity to be the universal, the current programs the particular, and that particulars are variable, flexible, even expendable, and never sacrosanct.

The child's mind is autistic, a rich texture of free synthesis, hallucinatory and unlimited. His mind can skip over syllogisms with ease, in a non-logical, dream-sequence kind of "knight's-move" continuum. He nevertheless shows a strong desire to participate in a world of others. Eventually his willingness for self-modification, necessary to win rapport with his world, is stronger than his desire for autonomy. Were it not, civilization would not be possible. That we succeed in moulding him to respond to our criteria shows the innate drive for communion and the flexibility of a young mind. It doesn't prove an essential and sanctified rightness of our own constructs.

Maturity, or becoming reality adjusted, restricts and diminishes this "knight's-move" thinking, and tends to make pawns of us in the process. The kind of adult logic that results is dependent on the kinds of demands made on the young mind by parents and society. If we believe our social view sacred and made in heaven, we tend to shut off a deep potential in which many of the terrors and shortcomings of our logic and reason might be averted. Exclusion of possibility is necessary to narrow and hold the mind to a world of others. The price of excluded possibility buys a prism that opens on specialized worlds. We lose and gain. But the autistic mode of mind offers a way around severe loss.

Benjamin Lee Whorf recognized cultural agreement as implicit and unstated, but absolutely obligatory. Agreement determines the way we organize nature into concepts giving nature significance. Agreement underlies our codified patterns of language. We cannot talk at all, Whorf claimed, except by "subscribing to the organization and classification of data which the agreement decrees." Whatever this agreement decrees is what then makes up reality. Cultural agreements are automatic and unconscious, built-in and unquestioned, furnishing the "obvious facts" of experience. These are the other factors moving into and synthesizing our "visual world" from the visual field.

We force our children, consciously and unconsciously, to selectively ignore certain phenomena and look for and nourish other phenomena. The child's capacity for imagination may put up a struggle. All of us "attend the world" only from necessity or specific reward. The mind wanders into byways every second it can. Its moments of attention are fragmented. Concrete things do not impinge on this flux of mind very much. Defensively tending to the world can be handled mechanically, but other people cannot. Jean-Paul Sartre spoke of hell as "other people," and his hell was well placed. Without others I could reign supreme, except that I must have others to reign at all.

All parties in a reality event are modified by each other. All create the common denominator through which they relate. To take part in society we must accept the social definitions and agreements that make up the society's reality picture. Our definitions outline the socially acceptable framework for what shall be considered real. This network of definition changes from culture to culture and period to period. It is arbitrary to an indeterminable degree, but is always the form for the only reality available.

... [1.5 paragraphs skipped]

... More important than this is the fact that the emerging mind will have mirrored whatever model it had during that formative period. The pattern formed in this plastic stage becomes firm. It hardens into the functional system of representation-response we call a world view. Once done, there is no undoing of the system except by metanoia resyntheses, that capacity for mutation which will occupy the next portion of this book. Even this mutation is dependent on the materials available for mutation—conversion is a creative process, but not magical.

This pattern formed by the mirroring of child mind and social pressure is not only the means then available for *coping* with a world and other people, it largely determines what shall be coped *with*. This world view is then the screen allowing only related data in, as well as the synthetic process determining the final cognitive shape *of* that admitted material. The pattern shapes the kind of world to respond to, and the world response that must then be made.

The infant's dream-like association of ideas is slowly won over to an agreement of *what* should constitute reality. By the time our reasoning has developed enough to reflect on the process by which our reasoning has formed, we are part and parcel of the whole process, caught up in and sustaining it. By the time the young rebel reaches the age of rebellion he is inevitably that against which he would rebel, his linear thrust ending as a pale reflection of the circle from which he would break.

Edward Hall writes that it is impossible for us to divest ourselves of culture, for it has penetrated to the roots of our nervous system and determines how we perceive the world. We cannot act or interact except through the medium of culture. Thus Whitehead could write of "fundamental assumptions" unconsciously presupposed by all the variant systems within an epoch. People do not know that they are tacitly assuming, for no other way of putting things has ever occurred to them; they are always merely responding to "obvious facts."

Whately Carington spoke of the limitations of the individual mind as matters of fact, not of law. We are limited by our agreements on possibility. Agreement is a common exclusion of alternate possibilities. Agreement is the cement of social structure. Two or three gathered together, agreeing on what they are after, may create a subset in which their goals can be achieved, even though folly in the eyes of the world. The world in this case means a set of expectancies agreed upon, a set excluding other possibilities.

Cornell's <u>Gibson</u> referred to a "visual field" as a constantly-shifting light pattern, bringing to mind Bruner's seven million shades of color. Gibson refers to the "visual world" as distinct from this "field." In the formation of a visual world, sensory data from *other sources* are used to correct the visual field. These "other sources" are the conceptual framework, the world view formation, built in the formative years. Seeing is a synthetic process incorporating our conceptual assumptions and esthetic conditionings.

Edward Hall points out that we are less actively aware of seeing than we are of talking. It is difficult to grasp that talking and understanding are synthetic processes, overlapping and incorporating an intricate network of varied responses. Much more difficult is the idea that seeing is subject to the same qualification. The variables that enter into seeing prove enormous, nevertheless, and people from different cultures not only use a different language, but inhabit a different sensory world, as Hall puts it.

So, when <u>Cohen</u> wrote that the world we see is far from an exact image of the physical world, I wondered how one could ever tell. He added that this was the case since perception is highly variable and often erroneous, and that we can only perceive what we can conceive. Cohen observed that we tend to see only what can be incorporated into our established frame of reference, and tend to reject anything not fitting. Cohen then presumed, however, that our notions of what is "out there" are based on an "indistinct uncertainty," and I thought of Blake's comment: "If the sun and moon should doubt, they'd immediately go out." Failure of nerve is the major sin. Cohen went on to conclude that for all we know, the "thing called reality may exist, but we shall never see it," and at this point I protested.

Is there an "exact image" of a physical world? Consider even photography. The same subject can be hideous or lovely according to the skill of the photographer. Photography is an *art* because it can catch aspects of reality that escape us, precisely as painting can do. I can traverse the same tired street year in and year out, familiar with every twig and stone—but a photographer can suddenly present me with a photograph of it that makes me catch my breath much as from a poem or a piece of music. I refuse to believe the "police lineup" photograph on my driver's license is my real image; as with all aspects of the police mentality it somehow has sought out the worst possible aspects of me.

Is the strange abstraction of the physicist an "exact image" of a world? The physicist is the last to claim this. But his at times absurd abstractions become contingencies *in* the processes of a physical world. Does the word *real* mean at all what the naïve realists and the tough-minded have claimed? What could the "atomically-verifiable statement" conceivably mean? Our error is in considering our concept-percept function to be separate and distinct *from* reality, rather than a dominant force in the *shaping* of it.

The condition called reality exists as an ever-current sum total of our representations and responses. Whatever we *see* is what reality *is* for us, and there will never be, from here to eternity, any other kind of reality for us. And this reality will always be in a process of mutation and change. <u>Huxley's</u> "homemade world" is a necessity in any context. There is no magic, there is only The Creation. There is no supernatural, but there are an infinite number of possible natures.

A point of centered thinking organizes and survives by relationship with similar points of thinking. It is a matter of agreement, a structuring of similar patterns of shared response.

We know now, according to Jerome Bruner, that our nervous system is *not* the "one-way street" it was long considered to be. All minds have a program of their own. The mind sends out monitoring orders to the sense organs and the "relay stations." The orders specify priorities for different kinds of environmental message. Selectivity is the rule. We used to think of the nervous system as a simple telephone switchboard, bringing in messages from outside. We know now, Bruner claims, that the system is every bit as much an "editorial hierarchy"—a policy-making device determining what is perceived.

Edward Hall, with his "proxemic research," speaks of *vision* as a "transaction between man and his environment in which both participate." Hall explores how we unconsciously structure our *visual world*. Perhaps we can consciously seize the process. William Blake antedated all this by two centuries. He said he used his eyes to see *with*, in active vision—a process in which creative imagination played a principal role. He did not look *from* his eyes as through a window, in passive sight, as <u>Descartes</u> or Locke would claim.

How can firm statements be made about a world to itself? The very statement enters as a contingency *in* that world. What is real is a variable. Though a regressing contingency stretches back to a hypothetical First Day, the visual world is what we *practice* day by day, and our capacity for practice is infinitely varied. Our "editorial policies" are more flexible than we dare imagine. Our range of selectivity is boundless. All things are possible to him who believes—that is, to him who believes in the possibility.

We feel that surely, to a man of good will and honesty, an honest look should inform of an honest reality—and we mean, of course, our reality. This common assumption has been questioned in our day—and this is a crack in the cosmic egg of the realisms of the past few centuries. Our survival may well depend on this crack splitting the blind world of politician and pentagonian. The crack should lead us to find an open-ended possibility, provided we can open to other world views, those of Oriental and archaic cultures for instance, as valid, rather than as objects for destruction that our own might reign supreme.

The open end of human potential is built into the blueprint of mind, and is contained in that mode I have called *autistic*. This is blocked, however, by blindness of *viewpoint*, and yet the autistic can be structured and realized only by assuming viewpoints. The openness nevertheless happens to us in peripheral and unsuspected ways. One of the most intriguing of these ways is the procedure of ultimately asked and passionately adhered to *questions*. The ways in which questions form in the mind and are answered is the next part, and the central part, of my exploration.

Buy The Crack in the Cosmic Egg: New Constructs of Mind and Reality...

The preceding excerpts from Joseph Chilton Pearce's classic work about mind and reality, which in large part concerns the private and public journey involved in destroying and rebuilding previous beliefs, were assembled by theoretical physicist and cosmologist, Alexander Franklin Mayer. It is intended to be a kind of external Foreword (or, as the case may be, an external Afterword) to his new book, *On the Geometry of Time in Physics and Cosmology and the Fall of the Canonical Cosmological Model* (May 2010). This technical book introduces a new conceptual and mathematical (geometric) model of time, which overthrows significant portions of twentieth-century physics. Indeed, *Geometry of Time* produces a large "crack in the cosmic egg." It is important that people understand how it was that seemingly infallible modern science embraced a number of wildly incorrect ideas for about a century and how to approach the difficult intellectual and emotional work of correcting our shared model of physical reality. With uncanny insight and accuracy, and with a prescient title, Joseph Chilton Pearce has fulfilled that need.

On the Geometry of Time in Physics and Cosmology is available as an open access e-book available at this URL:

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